

Applicant


```

Db      721 CTGGCCACACTACACTCCAGAAATCGATCAGAGAAATATTTTACATGAAAAATGA 780
QY      1263 GGAAGAGAGCTATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1322
Db      781 GGAAGAGAGCTATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 840
QY      1323 TTGGGGGGAGGGGTGATAGATTTATTTGACTTGAACCCCGATGACAAAAGACT 1382
Db      841 TTGGGGGGAGGGGTGATAGATTTATTTGACTTGAACCCCGATGACAAAAGACT 900
QY      1383 CACGCAAGGAGAGCTGTAGTCAACCCAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1442
Db      901 CACGCAAGGAGAGCTGTAGTCAACCCAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 960
QY      1443 TTAACGCGTCCCGAGAGGAGAGCTGAAATGAGAAACCAACTTTGAGAACCAAGTC 1502
Db      961 TTAACGCGTCCCGAGAGGAGAGCTGAAATGAGAAACCAACTTTGAGAACCAAGTC 1020
QY      1503 CTTTTCCTCCAAAGGTTCTGAAAGAAAAAATCAAAAAAATCAAAAAAATCAAAAAA 1562
Db      1021 CTTTTCCTCCAAAGGTTCTGAAAGAAAAAATCAAAAAAATCAAAAAAATCAAAAAA 1080
QY      1563 AAAAAA 1568
Db      1081 GAGAAA 1086

RESULT 3
AAZ20594
ID      AAZ20594 standard; DNA; 1128 BP.
AC      AAZ20594;
XX
XX
XX      23-NOV-1999 (first entry)
DE      Human fibroblast growth factor 98 coding sequence.
XX
XX      Fibroblast growth factor 98; FGF98; human; multipotent neural stem cell;
KM      progenitor cell; peripheral neuropathy; amyotrophic lateral sclerosis;
KM      Alzheimer's disease; Parkinson's disease; Huntington's disease; dementia;
KM      ischaemic stroke; brain injury; acute spinal cord injury; infection;
KM      nervous system tumour; multiple sclerosis; epilepsy; metabolic disease;
KM      peripheral nerve trauma; retinitis pigmentosa; macular degeneration;
KM      retinal detachment; myocardial infarction; peripheral vascular disease;
KM      renal artery disease; diagnosis; therapy; ss.
XX
XX      Homo sapiens.
OS
XX
XX      Key      Location/Qualifiers
FH      CDS      609..1091
FT      /*tag= a
FT      /product= FGF98
FT
XX
XX      W09946381-A2.
XX
XX      16-SEP-1999.
XX
XX      09-MAR-1999; 99MO-US05235.
XX
XX      09-MAR-1998; 98US-0077411.
PR      29-APR-1998; 98US-0083553.
PR      08-MAR-1999; 99US-0264851.
XX
XX      (CHIR ) CHIRON CORP.
XX
XX      Cen H, Garcia PD, Grieshammer U, Kassam A, Lee PP, Pot D;
PI      Gospodarowicz D, Martin K;
XX
XX      WPI: 1999-551410/46.
DR      P-PSDB; AAY39630.
XX
XX      New polynucleotide encoding a fibroblast growth factor, useful for
PT

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PT treating peripheral neuropathy, Alzheimer's disease, ischaemic stroke,
 brain or spinal cord injury, nervous system tumours, multiple sclerosis
 or epilepsy -

PS Disclosure: Page 59; 60pp; English.

CC This sequence encodes the human fibroblast growth factor 98 (FGF98) of
 CC the invention. FGF98 can be used for the isolation, regeneration,
 CC proliferation, and differentiation of mammalian multipotent neural stem
 CC cells, progenitor cells and progeny. Primary central (CNS) and peripheral
 CC nervous system (PNS) cells when treated with FGF98 proliferate, have at
 CC least a limited self regeneration capacity, and can undergo lineage
 CC restriction in response to the local environment. The FGF98 sequences can
 CC be used for providing trophic support for cells in a patient. They be
 CC used to treat e.g. peripheral neuropathy, amyotrophic lateral sclerosis,
 CC Alzheimer's disease, Parkinson's disease, Huntington's disease, ischaemic
 CC stroke, brain injury, acute spinal cord injury, nervous system tumours,
 CC multiple sclerosis, infection, dementia, epilepsy, peripheral nerve
 CC trauma or injury, exposure to neurotoxins, metabolic diseases, disorders
 CC of insufficient blood cells, retinitis pigmentosa, age-related macular
 CC degeneration, retinal detachment, myocardial ischaemia/infarction,
 CC peripheral vascular disease, renal artery disease and wound healing.
 CC Cells produced by treatment with FGF98 are also used to screen drugs and
 CC growth factors, which may affect development, differentiation, survival
 CC and/or function of CNS and PNS derived neurons and glia. FGF98 can also
 CC be used for the production of large amounts of otherwise minor
 CC populations of cells to be used for generation of cDNA libraries for the
 CC isolation of rare molecules expressed in precursor cells or progeny;
 CC cells produced by treatment may directly express growth factors or other
 CC molecules.

CC Sequence 1128 BP; 197 A; 385 C; 402 G; 144 T; 0 other;

XX Query Match 65.5%; Score 1027.6; DB 20; Length 1128;
 XX Best Local Similarity 99.6%; Pred. No. 2.3e-157;
 XX Matches 1030; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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QY      1  CCCAGCGCTGCCGAGACGCGTGGAGAGGAGAGACATGAGCCGCGGCGGCCA 60
Db      60  CCCAGCGCTGCCGAGACGCGTGGAGAGGAGAGACATGAGCCGCGGCGGCCA 119
QY      61  GAGGAGCGGCGCTGACGCTTTCGCGCTCACGCGCGGCCGACCCCGAGCGCTGAC 120
Db      120  GAGGAGCGGCGCTGACGCTTTCGCGCTCACGCGCGGCCGACCCCGAGCGCTGAC 179
QY      121  CCTGGGCCCGACGAGCTCCGCGCGCGCGGAGAGGAGCACTGGGCTTCAGACCCGC 180
Db      180  CCTGGGCCCGACGAGCTCCGCGCGCGCGGAGAGGAGCACTGGGCTTCAGACCCGC 239
QY      181  CGCGATGCTGTCCCGGACTGAGCCGGGACAGCCAGCTCCACAGGAGCCCGGAGCGCC 240
Db      240  CGCGATGCTGTCCCGGACTGAGCCGGGACAGCCAGCTCCACAGGAGCCCGGAGCGCC 299
QY      241  GCGCGGCGAGAGTAGAGGAGCTTCCCGACCGGCGAGGCGCTCTGTGCACAGCGCTG 300
Db      300  GCGCGGCGAGAGTAGAGGAGCTTCCCGACCGGCGAGGCGCTCTGTGCACAAAGCGCTG 359
QY      301  CCGCGCCGAGAGCCCTGGCGCGAGCGCGGAGGCGAGGCTGGGAGAGCGCGCGGGG 360
Db      360  CCGCGCCGAGAGCCCTGGCGCGAGCGCGGAGGCGAGGCTGGGAGAGCGCGCGGGG 419
QY      361  CGCTATGCGCGAGGCGCGCGCGGAGCGCCCGGAGCAGAGAGTGTGACAGCAGCAGC 420
Db      420  CGCTATGCGCGAGGCGCGCGCGGAGCGCCCGGAGCAGAGAGTGTGACAGCAGCAGC 479
QY      421  AGCGGCGAGAGGAGAGCAGCAGCGGCGGCGCGCGCGCGCGCGCGGAGCGCGCC 480
Db      480  AGCGGCGAGAGGAGAGCAGCAGCGGCGGCGCGCGCGCGCGCGCGGAGCGCGCC 539
QY      481  CGGTCCCGCGCGCGGAGAGCAGTGTGACAGCTGTGAGAGCCCGCGCTCCCTCC 540
Db      540  CGGTCCCGCGCGCGGAGAGCAGTGTGACAGCTGTGAGAGCCCGCGCTCCCTCC 599

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QY	541	CGCCACGAGTATTCAGGCGCCCTCGGCTGACATGCTGTATTCACATCCGTGTG	600
Db	600	CGCCACGAGTATTCAGGCGCCCTCGGCTGACATGCTGTATTCACATCCGTGTG	659
QY	601	CTGTGCTCCAGGTACAGGTGCTGTGTGCGGAGGAAAGTGGACTTCGCCATCCACGTG	660
Db	660	CTGTGCTCCAGGTACAGGTGCTGTGTGCGGAGGAAAGTGGACTTCGCCATCCACGTG	719
QY	661	GAGAACGAGCGGGGCTGGGACATGTGACCCGTAAACACACTCGGCTGTACCAAGTC	720
Db	720	GAGAACGAGCGGGGCTGGGACATGTGACCCGTAAACACACTCGGCTGTACCAAGTC	779
QY	721	TACAGCCGAGCACAGTGGGAAACACATCCAGGTCTGTGGCCGAGAGTACAGTCCCGCGGC	780
Db	780	TACAGCCGAGCACAGTGGGAAACACATCCAGGTCTGTGGCCGAGAGTACAGTCCCGCGGC	839
QY	781	GAGATGGGACAAAGTATGCCGCTCTCTAATGTGAGACACGAACTTGTGGTATGTCAAGTC	840
Db	840	GAGATGGGACAAAGTATGCCGCTCTCTAATGTGAGACACGAACTTGTGGTATGTCAAGTC	899
QY	841	CGGATCAAGGGCAAGAGAGACGGAATTTCTACTGTGCATGAACCGCAAGAGCAAGCTGTG	900
Db	900	CGGATCAAGGGCAAGAGAGAGGAATTTCTACTGTGCATGAACCGCAAGAGCAAGCTGTG	959
QY	901	GGGAAGCCCATGTGGCACACCAAGGAGTGTGTGTTCATCGAAGAAAGTTCTGGAGAACAC	960
Db	960	GGGAAGCCCATGTGGCACACCAAGGAGTGTGTGTTCATCGAAGAAAGTTCTGGAGAACAC	1019
QY	961	TACAGGCGCCTGATGTGCGGTAAGTACTCGGCTGGTACGTGGGCTTACCAAGAAAGGG	1020
Db	1020	TACAGGCGCCTGATGTGCGGTAAGTACTCGGCTGGTACGTGGGCTTACCAAGAAAGGG	1079
QY	1021	CGGCGCGGGAAGG 1034	
Db	1080	CGGCGCGCTTAGAG 1093	

Accession	Gene	Species	Location/Qualifiers
AA250351	standard; cDNA; 833 BP.		
AA250351			
AA250351			
18-MAY-2000	(first entry)		
Human heart specific FGF-8b cDNA (confirmed sequence).			
Human; heart specific fibroblast growth factor-8b; FGF-8b;			
secreted protein; angiogenesis; anti-angiogenesis; cell differentiation;			
diagnosis; prognosis; screening; treat; cancer; ischaemic heart disease;			
vascular; gene therapy; ds.			
Homo sapiens.			
Key			
CDS			
Location/Qualifiers			
39..662			
/*tag= a			
/product= "Heart specific fibroblast growth factor-8b"			
39..119			
/*tag= b			
120..659			
/*tag= c			
/product= "Mature FGF-8b"			
MO200005369-A2.			
03-FEB-2000.			
20-JUL-1999;			
99WO-US12839.			
20-JUL-1998;			
98US-0093397.			
10-SEP-1998;			
98US-0150684.			

PA (CURA-) CURAGEN CORP.
XX
X1 Shinkets RA;
XX
DR WPI; 2000-182696/16.
DR P-PSDB; AAY44844.
XX
PT Novel angiogenesis and anti-angiogenesis secreted proteins used to
PT control angiogenesis -
XX
PS Claim 22; Fig 3B; 32pp; English.
XX
CC The present sequence is a CDNA (confirmed sequence) encoding
CC heart specific fibroblast growth factor-8b (FGF-8b), an angiogenesis/
CC anti-angiogenesis secreted protein from human heart library.
CC
CC The protein exhibits angiogenic
CC (either inducing or inhibiting) or cell differentiation activity.
CC The present sequence can be used for diagnosis, prognosis, screening
CC and treating diseases and disorders associated with aberrant levels of
CC the secreted protein. The protein can be used to control angiogenesis
CC e.g. in cancers, ischaemic heart and vascular diseases. The
CC polynucleotide can also be used in gene therapy.
XX
X0 Sequence 833 BP; 201 A; 239 C; 249 G; 142 T; 2 other;

Query Match	52.9%	Score 831	DB 21	Length 833
Best Local Similarity	99.8%	Pred. No. 1.4e-125		
Matches 831	Conservative	0	Mismatches 2	Indels 0
				Gaps 0
QY	512	GACCTGGGCTAGAGACCGCGCCCTCCCTCCCGCCACAGCATGATTTCACAGCGCCCTCCGCT	571	
DB	1	GGCTGGGCTAGAGACCGCGCCCTCCCTCCCGCCACAGCATGATTTCACAGCGCCCTCCGCT	60	
QY	572	GCACCTGGCTGTGTTTACACTTCCGTGCTGTGCTTCCAGGTACAGGTGCTGTGTCGG	631	
DB	61	GCACCTGGCTGTGTTTACACTTCCGTGCTGTGCTTCCAGGTACAGGTGCTGTGTCGGC	120	
QY	632	AGGAGACAGCTGACATTCGCGATCCACGTGTGAGAACACAGCGGGCTCGGACGATGTCA	691	
DB	121	AGGAGAACGTGACATTCGCGATCCACGTGTGAGAACACAGCGGGCTCGGACGATGTCA	180	
QY	692	GCCGTAACGACGTGGGGCTGTACAGCTCTACAGCGGACGAGTGAGGAAACATCCACAG	751	
DB	191	GCCGTAACGACGTGGGGCTGTACAGCTCTACAGCGGACGAGTGAGGAAACATCCACAG	240	
QY	752	TCCCTGGGCGCGAGATCATGTGCCCGCGGAGATGGGACCAAGTATGCCAGCTCCTAG	811	
DB	241	TCCCTGGGCGCGAGATCATGTGCCCGCGGAGATGGGACCAAGTATGCCAGCTCCTAG	300	
QY	812	TGGAGACAGACACCTTCGGTACTCAAGTCCGATCAAGGGCAAGGACGGAATTCCTACC	871	
DB	301	TGGAGACAGACACCTTCGGTACTCAAGTCCGATCAAGGGCAAGGACGGAATTCCTACC	360	
QY	872	TGTGATGATACCGCAAGGCAAGCTTCGTGTGGGAAAGCCGATGTGCACACGAAGAGTGTG	931	
DB	361	TGTGATGATACCGCAAGGCAAGCTTCGTGTGGGAAAGCCGATGTGCACACGAAGAGTGTG	420	
QY	932	TGTTATGAGAGAGGTTCTGGAGAACACTACAGGCGCCTGATGTGTCGGTAAGTACTCCG	991	
DB	421	TGTTATGAGAGAGGTTCTGGAGAACACTACAGGCGCCTGATGTGTCGGTAAGTACTCCG	480	
QY	992	GCTGTAGCTGGGGCTTACCAAGAAGGGGGCGCCGCGAGAGGGCCCAAGACCCCGGAGA	1051	
DB	481	GCTGTAGCTGGGGCTTACCAAGAAGGGGGCGCCGCGAGAGGGCCCAAGACCCCGGAGA	540	
QY	1052	ACCACGAGACGTGCATTTTCATGAAGCGCTACCCCAAGGGGACGCGGAGCTTCAAGAAC	1111	
DB	541	ACCACGAGACGTGCATTTTCATGAAGCGCTACCCCAAGGGGACGCGGAGCTTCAAGAAC	600	
QY	1112	CCTTCAATTACACGACGGTGACCAAGAGGTCCCGTGTGATTCGGGCCACACACCTGCT	1171	
DB	601	CCTTCAATTACACGACGGTGACCAAGAGGTCCCGTGTGATTCGGGCCACACACCTGCT	660	

AC	AA007795,	
XX		
DT	10-SEP-2001 (first entry)	
XX		
DE	Human fibroblast growth factor (zFGF5) cDNA.	
XX		
KW	Human: fibroblast growth factor-18; FGF-18; zFGF5; FGF receptor-2;	
KW	FGF receptor-3; cytoxin; cell proliferation inhibitor; tumour;	
KW	multiple myeloma; bladder carcinoma; cervix carcinoma; cytostatic;	
KW	thyroid carcinoma; osteosarcoma; ss.	
XX		
OS	Homo sapiens.	
XX		
FH	Key	Location/Qualifiers
FT	CDS	1..624
FT		/tag= a
FT	sig_peptide	/product= "Human fibroblast growth factor (zFGF5)"
FT		1..81
FT	mat_peptide	/tag= b
FT		82..621
FT		/tag= c
FT		/product= "Human mature fibroblast growth factor (zFGF5)"
XX		
PN	WO200139788-A2.	
XX		
PD	07-JUN-2001.	
XX		
PF	28-NOV-2000; 2000WO-US32380.	
XX		
PR	02-DEC-1999; 99US-0452977.	
XX		
PA	(ZYMO) ZYMOGENETICS INC.	
XX		
PI	West JW;	
XX		
DR	WPI: 2001-417789/44.	
DR	P-PSDB; AA04536.	
XX		
PT	Novel fibroblast growth factor targeting composition useful for	
PT	inhibiting the proliferation of cells expressing FGF receptor 3 or FGF	
PT	receptor 2 -	
XX		
PS	Disclosure; Page 57-58; 62pp; English.	
XX		
CC	The present invention relates to methods for targeting cells that	
CC	express fibroblast growth receptor-3 or -2. Fibroblast growth	
CC	factor-18 (FGF-18) binds with FGF receptor-2 and -3. A targeting	
CC	composition comprising FGF-18 component and cytoxin, is useful for	
CC	inhibiting the proliferation of cells that express FGF receptor-3 or	
CC	-2, in a subject having tumour cells such as multiple myeloma cells,	
CC	bladder carcinoma cells, cervix carcinoma cells, thyroid carcinoma	
CC	cells, osteosarcoma cells and intestinal smooth muscle cells. The present	
CC	sequence is a cDNA encoding human zFGF5 protein.	
XX		
CC		
XX		
SQ	Sequence 917 BP; 244 A; 258 C; 252 G; 163 T; 0 other;	
XX		
Query Match	51.3%; Score 805.2; DB 22; Length 917;	
Best Local Similarity	91.6%; Pred. No. 2e-121;	
Matches 907; Conservative	0; Mismatches	13; Indels 80; Gaps 2;
XX		
OY	550 ATGTATTCAGGCGCCCTCCGCTGACACTTGCCTGTATTACACTTCCGTGCTGCTTC	609
Db	1 ATGTATTCAGGCGCCCTCCGCTGACACTTGCCTGTATTACACTTCTGCTGCTTC	60
OY	610 CAGTACAGGCTGCTGTTGCCGAGAGAACTGACTTCCGCATCCACGTGAGAACCG	669
Db	61 CAGTACAGGCTGCTGTTGCCGAGAGAACTGACTTCCGCATCCACGTGAGAACCG	120
OY	670 ACGCGGCTCGGGAAGATGTAGCCCTTACAGCACTGCGGCTGTACACGTCTACAGCCGG	729
Db	121 ACGCGGCTCGGGAAGATGTAGCCCTTACAGCACTGCGGCTGTACACGTCTACAGCCGG	180

OY	730	ACCGTGGGAAACACATCCAGTCTCTGGCCGCGAGGATACAGTGGCCCGCGGAGAGATGGG	789
OY	730	ACCGTGGGAAACACATCCAGTCTCTGGCCGCGAGGATACAGTGGCCCGCGGAGAGATGGG	789
Db	181	ACCAATGGGAAACACATCCAGTCTCTGGCCGCGAGGATACAGTGGCCCGCGGAGAGATGGG	240
OY	790	GACAAGTWTGGCCAGCTCTAGTGGAGACACACACTTCCTGGTAGTCAAGTCCGATCAAG	849
Db	241	GACAAGTWTGGCCAGCTCTAGTGGAGACACACACTTCCTGGTAGTCAAGTCCGATCAAG	300
OY	850	GGCAAGGAGAGCGGAATTTCTACCTGTGCATGAACCGCAAAAGGCAAGCTGTGGGAGCC	909
Db	301	GGCAAGGAGAGCGGAATTTCTACCTGTGCATGAACCGCAAAAGGCAAGCTGTGGGAGCC	360
OY	910	GATGGCACCCACAGAGAGTGTGTTCATTCAGAAAGTTCTGGGAAACAACTACAGGCC	969
Db	361	GATGGCACCCACAGAGAGTGTGTTCATTCAGAAAGTTCTGGGAAACAACTACAGGCC	420
OY	970	CTGATGTGCGGTAAAGTACTCCGGCTGGATCTGGGACTGGGCTTCACCAAGAAAGGGGCGCCGG	1029
Db	421	CTGATGTGCGGTAAAGTACTCCGGCTGGATCTGGGACTGGGCTTCACCAAGAAAGGGGCGCCGG	480
OY	1030	AAGGGCCCCAAGACCCGCGGAGAACAGCAGCAGCAGTGCATTTTCATGAAGCGCTACCCCAAG	1089
Db	481	AAGGGCCCCAAGACCCGCGGAGAACAGCAGCAGCAGTGCATTTTCATGAAGCGCTACCCCAAG	540
OY	1090	GGGCAGCCGCGAGCTTCAGAGCCCTTCAATGACAGCAGCGGTGACCAAGAGAGTCCCGTGG	1149
Db	541	GGGCAGCCGCGAGCTTCAGAGCCCTTCAATGACAGCAGCGGTGACCAAGAGAGTCCCGTGG	600
OY	1150	ATCCGGCCCCACACACCTCGCTAGGCGCAACCCCGCGCGCCCTTCAGAGTGTGGCCCTGACCA	1209
Db	601	ATCCGGCCCCACACACCTCGCTAGGCGCAACCCCGCGCGCCCTTCAGAGTGTGGCCCTGACCA	659
OY	1210	CACGTACACTCCCAAGAAACTGCATCAGAGAAATATTTTTCATGAAAAATAAAGAGAA	1269
Db	660	CACGTACACTCCCAAGAAACTGCATCAGAGAAATATTTTTCATGAAAGAAAA-----	708
OY	1270	GCTCTATTTTGTACATTGTGTTAAAGAGACAAAAAATGAACAAAACTCTTGGGGG	1329
Db	709	-----	708
OY	1330	GAGGGGTATTAAGATTTTATTTGTTGACTTAAACCCCCCGATGACAAAGAACTACGCCAA	1389
Db	709	-----ATAAGGATTTTATTTGTTGACTTAAACCCCCCGATGACAAAGAACTACGCCAA	760
OY	1390	AGGACCTGTAGCAACCCACAGAGTGCTGTCTCTCTAGAGAACAGACACTTAACCTC	1449
Db	761	AGGACCTGTAGCAACCCACAGAGTGCTGTCTCTCTCTAGAGAACAGACACTTAACCTC	820
OY	1450	GTCGCCAGAGAGAGACTTGAATGAGAAACCAACACTTTGAGAAAGCCAAAGTCTTTTTC	1509
Db	821	GTCGCCAGAGAGAGACTTGAATGAGAAACCAACACTTTGAGAAAGCCAAAGTCTTTTTC	880
OY	1510	CCAAAGTTCTGAAAGGAAAAAAAAAAAAA 1539	
Db	881	CCAAAGTTCTGAAAGGAAAAAAAAAAAAA 910	
RESULT 7			
AAS00951			
ID	AAS00951 standard; DNA; 917 BP.		
XX	AAS00951;		
XX	16-Jul-2001 (first entry)		
DE	Human DNA encoding a fibroblast growth factor homologue, zFGF-5.		
XX	Human; fibroblast growth factor homologue; zFGF-5; plasmid construction;		
KW	homologous recombination; ds.		
XX	Homo sapiens.		
XX	Key Location/Qualifiers		

FT	CDS	1..624
FT	/tag= a	
FT	/product= "zFGF-5"	
FT	sig_peptide	1..78
FT	/tag= b	
FT	mat_peptide	79..621
FT	/tag= c	
FT	/label= Mature_zFGF-5	
EN	US6207442-B1.	
PD	27-MAR-2001.	
XX		
XX	15-OCT-1998;	98US-0173043.
PR	16-OCT-1997;	97US-0062061.
PA	(ZYMO) ZYMOGENETICS INC.	
XX		
PI	Raymond CK;	
XX		
DR	WPI; 2001-256851/26.	
DR	P-PSDB; AAU01240.	
XX		
PT	Preparing a double-stranded, circular DNA molecule, involves homologous recombination of one or more donor DNA fragments encoding the protein of interest, with an acceptor plasmid and DNA linkers in host cell -	
XX		
PS	- Example 5; Columns 25-28; 23pp; English.	
XX		
CC	The sequence encodes a Human fibroblast growth factor homologue, zFGF-5, used to demonstrate the method of the invention. The method of the invention comprises preparing a double-stranded, circular DNA molecule, comprising combining donor DNA fragments encoding the protein of interest with an acceptor plasmid, and two DNA linkers in a Saccharomyces cerevisiae host cell. The encoding DNA is linked to the acceptor plasmid by homologous recombination of with the linkers and acceptor plasmid to form the closed, circular plasmid. The obtained plasmid is useful for transforming host cells and producing proteins of interest. The method allows for production of a standardised plasmid into which a variety of DNA sequences can be readily inserted and subsequently expressed.	
CC		
CC		
SQ	Sequence 917 BP; 244 A; 258 C; 252 G; 163 T; 0 other;	
Query Match	51.3%; Score 805.2; DB 22; Length 917;	
Best Local Similarity	91.6%; Pred. No. 2e-121;	
Matches 907; Conservative	0; Mismatches 3; Indels 80; Gaps 2	
OY	550 ATGTTATTCAGCGCCCTCCGGCCTGCACATTGCCGTTCACATTCCTCGTGCCTGCTTC	609
Db	1 ATGTAATTAAGCCCTCCCGCTGCACCTTGCTGTTCACATTCCTCGTGCCTGCTTC	60
OY	610 CAGTACAGAGTGCTGTTGTCGAGGAGAAGCACTGCATCCGATCCAGTGGAGAACCAG	669
Db	61 CAGGTACAGAGTGCTGTTGTCGAGGAGAAGCACTGCATCCGATCCAGTGGAGAACCAG	120
OY	670 ACGCGGCTCGGAGCATGTGAAGCCGTAAAGCACTGCGGCTGTACACGCTTACACCGG	729
Db	121 ACGCGGCTCGGAGCATGTGAAGCCGTAAAGCACTGCGGCTGTACACGCTTACACCGG	180
OY	730 ACCACTGGGAAAACAATCATCAGTCTCTGGGCGCCAGATATGATGCCCCGCGGAGATGG	789
Db	181 ACCACTGGGAAAACAATCATCAGTCTCTGGGCGCCAGATATGATGCCCCGCGGAGATGG	240
OY	790 GACAGTATGCCCACACTCTTAGTGAAGACAGACACTTGGTGAATCAATCCGATCAAG	849
Db	241 GACAGTATGCCCACACTCTTAGTGAAGACAGACACTTGGTGAATCAATCCGATCAAG	300
OY	850 GGCAAGGAGAGCGAATTTACCTGTGCATGAACCCAAAGGCAAGCTGTGGGGAAGCCC	909
Db	301 GGCAAGGAGAGCGAATTTACCTGTGCATGAACCCAAAGGCAAGCTGTGGGGAAGCCC	360
OY	910 GATGCAACCCAGCAGAGATGTGTTCATCCAGAAAGTTCTTGAGAACACTTACACGGCC	969

Df			
Df	361	GATGGCAGACGACGAAGGTGTGTCTTCATCGAAGAAGTCTTGAGAACACTACACGGCC	420
Oy	970	CTGATGTGCGCTAAGTACTCCGGCTGGTACGTGGGCTTCACCAGAAGGGGCGGCCGG	1023
Df	421	CTGATGTGCGCTAAGTAAGTCTCCGGCTGGTACGTGGGCTTCACCAGAAGGGGCGGCCGG	480
Oy	1030	AAGGGCCCCAAGACCCGGGAGAACACAGACAGACGTGCATTTCATGAAGGCTACCCCAAG	1088
Df	481	AAGGGCCCCAAGACCCGGGAGAACACAGACAGACGTGCATTTCATGAAGGCTACCCCAAG	540
Oy	1090	GGGAGCGCGGAGCTTCGAAAGCCCTTCATACACAGCGGTGACCCAAAGAGTCCCGCTGG	1149
Df	541	GGGAGCGCGGAGCTTCGAAAGCCCTTCATACACAGCGGTGACCCAAAGAGTCCCGCTGG	600
Oy	1150	ATCCGGCCACACACACCCCTGCTAGAGCCACCCGCGCGGCCCTCAGTCCCTGAGCCA	1209
Df	601	ATCCGGCCACACACACCCCTGCTAGAGCCACCCGCGGCCCTCAGTCCCTGAGCCA	659
Oy	1210	CACTCACACCTCCCAAGAACTGCATCAGAGGAATATTTTACATGAAAATAAGAGACA	1265
Df	660	CACTCACACCTCCCAAGAACTGCATCAGAGGAATATTTTACATGAAA-----	708
Oy	1270	GCTCATTTTTGTACATTTGTATTAAGAAGACAAAACTGACCAAAACTCTTGGGGG	1329
Df	709	-----	708
Oy	1330	GAGGGGTGATTAAGGATTTTATTTGTGACTTGAACCCCGATGACAAAAAGACTCACGCA	1389
Df	709	-----ATTAAGATTTTATTTGTGTGACTTGAACCCCGATGACAAAAAGACTCACGCA	760
Oy	1380	AGGACACTGTAGTCAACCCACAGSTGCTGTCTCTCTCTAGAAACAGACACTCTAACTC	1449
Df	761	AGGACACTGTAGTCAACCCACAGSTGCTGTCTCTCTCTAGAAACAGACACTCTAACTC	820
Oy	1450	GTCCCCAGAGAGGACTTGAATGAGAAACCAACACTTGTGAGAGCCAAAGTCCCTTTTC	1509
Df	821	GTCCCCAGAGAGGACTTGAATGAGAAACCAACACTTGTGAGAGCCAAAGTCCCTTTTC	880
Oy	1510	CCAAAGGTTCTGAAAGGAAAAAAAAAAAAA	1539
Df	881	CCAAAGGTTCTGAAAGGAAAAAAAAAAAAA	910
<hr/>			
RESULT 8			
AAD07796			
ID	AAD07796	standard; cDNA; 1023 bp.	
XX	AAD07796;		
XX	10-SEP-2001 (first entry)		
DE	Mouse fibroblast growth factor (zFGF5) cDNA.		
XX			
KW	Mouse; fibroblast growth factor-18; FGF-18; zFGF5; FGF receptor-2;		
KM	FGF receptor-3; cytochrome; cell proliferation inhibitor; tumour;		
KW	multiple myeloma; bladder carcinoma; cervix carcinoma; cytostatic;		
RN	thyroid carcinoma; osteosarcoma; ss.		
XX			
OS	Mus musculus.		
XX			
FH	Key	Location/Qualifiers	
FT	CDS	1..624	
FT	/tag-	a	
FT	/product-	"Mouse fibroblast growth factor (zFGF5)"	
XX	WO200139788-A2.		
XX			
PD	07-JUN-2001.		
PF	28-NOV-2000; 2000MO-US32380.		
RR	02-DEC-1999; 99US-0452977.		

Db 301 TGAGACAGACACCTTCGTAGTCAATCCGATCAAGGGCAAGAGACGGAATTTACC 360
QY 872 TGTGCATGAACCCGAAAGGCAAGTCTGGGGAAAGCCCATGGCACCAGCAAGAGTGTG 931
Db 361 TGTGCATGAACCCGAAAGGCAAGTCTGGGGAAAGCCCATGGCACCAGCAAGAGTGTG 420
QY 932 TGTTCATCGAAGAGTCTGTGAGAACTACACGGCCCTGATGTGGCTAAGTACTCCG 991
Db 421 TGTTCATCGAAGAGTCTGTGAGAACTACACGGCCCTGATGTGGCTAAGTACTCCG 480
QY 992 GCTGTACGTGGGGCTTACCAGAAAGGGGGCGCGGAAAGGGCCCAAGACCCGGGAGA 1051
Db 481 GCTGTACGTGGGGCTTACCAGAAAGGGGGCGCGGAAAGGGCCCAAGACCCGGGAGA 540
QY 1052 ACCAGCAGGACGTGCATTTCA-TGAACGCTACCCCAAGGGGC-AGCGGAGCTTCAGAA 1109
Db 541 ACCAGCAGGACGTGCATTTCA-TGAACGCTACCCCAAGGGGC-AGCGGAGCTTCAGAA 600
QY 1110 GCCCTCAAGTACAGCAGAGGTGACCAAGAGTCCCGT-CGGATCGGGCCCAACACCCCTG 1168
Db 601 GCCCTCAAGTACAGCAGAGGTGACCAAGAGTCCCGT-CGGATCGGGCCCAACACCCCTG 660
QY 1169 CCT-AGGCCACCCCGCGCGGCCCTC 1194
Db 661 CCTAAGGGCAACCCGCGCGGGGCC 687

RESULT 11
AAZ46767
ID AAZ46767 standard; cDNA; 621 BP.
XX
AC AAZ46767;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human fibroblast growth factor encoding cDNA.
XX
KM Fibroblast growth factor; FGF; tissue formation;
KW Lung tissue interference; human; ss.
OS Homo sapiens.
XX
PN JP11332570-A.
XX
PD 07-DEC-1999.
XX
PF 27-MAY-1998; 98JP-0145478.
XX
PR 27-MAY-1998; 98JP-0145478.
XX
PA (SHIO) SHIONOGI & CO LTD.
XX
DR WPI; 2000-091354/08.
XX
DR P-PSDB; AAY56817.
XX
PT A new fibroblast growth factor and a gene coding it - useful for
PT prevention, treatment and diagnosis of tissue formation interference or
PT treatment of lung tissue interference
XX
XX
PS Claim 1; Page 7-8; 16pp; Japanese.
XX
CC The invention provides fibroblast growth factor (FGF) proteins from
CC human, rat and mouse. FGF is useful for prevention, treatment and
CC diagnosis of tissue formation interference or treatment of lung tissue
CC interference. The present sequence represents a human FGF encoding cDNA.
XX
SQ Sequence 621 BP; 140 A; 180 C; 196 G; 105 T; 0 other;

Query Match 39.5%; Score 619.4; DB 21; Length 621;
Best Local Similarity 99.8%; Pred. No. 2e-91;
Matches 620; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 550 ATGATATCAGGGCCCTCGGCTGCATTCGCTGTTCATACACTTCGCTGCTGCTTC 609

Db 1 ATGATATTCGCGCCCTCGGCTGCATTCGCTGTTCATACACTTCGCTGCTGCTTC 60
QY 610 CAGGTACAGTGTCTGTGTCCGAGAGAACGTGATTCGCAATCCACGTGAGAACCCAG 669
Db 61 CAGGTACAGTGTCTGTGTCCGAGAGAACGTGATTCGCAATCCACGTGAGAACCCAG 120
QY 670 ACGGGGCTCGGAGCATGTGTAGCCGTAAAGAGTGGGGCTGTACCGCTTACAGCCG 729
Db 121 ACGGGGCTCGGAGCATGTGTAGCCGTAAAGAGTGGGGCTGTACCGCTTACAGCCG 180
QY 730 ACCAGTGGGAAACATCCAGAGTCTGTGGCGCAGAGATCAATGCGCGGAGAGTGG 789
Db 181 ACCAGTGGGAAACATCCAGAGTCTGTGGCGCAGAGATCAATGCGCGGAGAGTGG 240
QY 790 GACAAGTATGCCAGCTCTTAACTGAGAGACAGACACTTGGTACTCAAGTCCGATCAAG 849
Db 241 GACAAGTATGCCAGCTCTTAACTGAGAGACAGACACTTGGTACTCAAGTCCGATCAAG 300
QY 850 GCGAAGGAGACGAATTCATCTGTGATGAACCGCAAGGCTGCGGGGAAGCC 909
Db 301 GCGAAGGAGACGAATTCATCTGTGATGAACCGCAAGGCTGCGGGGAAGCC 360
QY 910 GATGCAACAGCAGAGAGTGTGTTCATCGAAGAGTTCGAGAACACTACACGCGC 969
Db 361 GATGCAACAGCAGAGAGTGTGTTCATCGAAGAGTTCGAGAACACTACACGCGC 420
QY 970 CTGATGTGCGCTAAGTACTCCGCGTGTGACTGGGCTTACCAAGAGGGCGCGCGG 1029
Db 421 CTGATGTGCGCTAAGTACTCCGCGTGTGACTGGGCTTACCAAGAGGGCGCGCGG 480
QY 1030 AAGGGCCCAAGACCCGGGAGACAGCAGAGGATTCATGAAGCGGTACCCCAAG 1089
Db 481 AAGGGCCCAAGACCCGGGAGACAGCAGAGGATTCATGAAGCGGTACCCCAAG 540
QY 1090 GGGCAGCGGAGCTTCAAGAACCCCTCAAGTACAGCAGAGGTTGACCAAGAGGGCTGTGG 1149
Db 541 GGGCAGCGGAGCTTCAAGAACCCCTCAAGTACAGCAGAGGTTGACCAAGAGGGCTGTGG 600
QY 1150 ATCCGGCCCAACACACCTGCG 1170
Db 601 ATCCGGCCCAACACACCTGCG 621

RESULT 12
AAZ46769
ID AAZ46769 standard; cDNA; 621 BP.
XX
AC AAZ46769;
XX
DT 31-MAR-2000 (first entry)
XX
DE Mouse fibroblast growth factor encoding cDNA.
XX
KM Fibroblast growth factor; FGF; tissue formation;
KW Lung tissue interference; mouse; ss.
OS Mus sp.
XX
PN JP11332570-A.
XX
PD 07-DEC-1999.
XX
PF 27-MAY-1998; 98JP-0145478.
XX
PR 27-MAY-1998; 98JP-0145478.
XX
PA (SHIO) SHIONOGI & CO LTD.
XX
DR WPI; 2000-091354/08.
XX
DR P-PSDB; AAY56819.
XX
PT A new fibroblast growth factor and a gene coding it - useful for

PT prevention, treatment and diagnosis of tissue formation interference or
PT treatment of lung tissue interference

XX
XX
PS Claim 1; Page 9-10; 16pp; Japanese.

XX
XX
CC The invention provides fibroblast growth factor (FGF) proteins from
CC human, rat and mouse. FGF is useful for prevention, treatment and
CC diagnosis of tissue formation interference or treatment of lung tissue
CC interference. The present sequence represents a mouse FGF encoding cDNA.

XX
XX
SQ Sequence 621 BP; 151 A; 168 C; 182 G; 120 T; 0 other;

Query Match 33.3%; Score 523.4; DB 21; Length 621;
Best Local Similarity 90.2%; Pred. No. 6.4e-76;

Matches 560; Conservative 0; Mismatches 61; Indels 0; Gaps 0;

OY 550 ATGTAATTCAGGCGCCCTCCGCTGCACTTCCGCTGTTACTTCTCTGCTGCTTC 609
DB 1 ATGTAATTCAGGCGCCCTCCGCTGCACTTCCGCTGTTACTTCTCTGCTGCTTC 60
OY 610 CAGGTACAGGTGCTGTTGCTCCGAGAGAACTGCACTTCCGATCCAGTGAACAG 669
DB 61 CAGGTACAGGTGTTGGACCGAGAGAACTGCACTTCCGATCCAGTGAACAG 120
OY 670 ACCGCGGCTCGGAGAGATGAGCCGTAAGCAAGCTGCGCTTACCAAGCTTACAGCCG 729
DB 121 ACCGCGGCTCGAGATGATGTGAGTGGAAAGCAGTGGCTTACCAAGCTTACAGCA 180
OY 730 ACCAGTGGAAACATATCCAGTCCGCGGCGAGATACAGCCGCGGAGATGG 789
DB 181 ACCAGTGGAAACATATTCAGTCTGGGCGTAGATAGTCCCGGCGAGAGAGCG 240
OY 790 GACAAGTATGCCAGCTCTCTAGTGAAGACAGACACCTTCCGTAGTCAAGTCCGATCA 849
DB 241 GACAAGTATGCCAGCTCTCTAGTGAAGACAGATACCTTGGAGTCAAGTCCGATCA 300
OY 850 GCGAAGAGAGAGATTTCTACTGTGATGAACCCGAAAGCAAGCTGTGGGAAGCC 909
DB 301 GCGAAGAGAGAGATTTCTACTGTGATGAACCCGAAAGCAAGCTGTGGGAAGCC 360
OY 910 GATGACACAGCAAGAGATGTGTTCATCGAGAGAGTTCGAGAACTACACAGCG 969
DB 361 GATGACACAGCAAGAGATGTGTTCATCGAGAGAGTTCGAGAACTACACAGCG 420
OY 970 CTGATGTGCGCTAAGTACTCCGGCTGTGATGAGTGGCTTACCAAGAGGGCGCGCG 1029
DB 421 CTGATGTGCGCTAAGTACTCCGGCTGTGATGAGTGGCTTACCAAGAGGGCGCGCG 480
OY 1030 AAGGCGCCCAAGAGACCGGGAGAGACAGAGAGCTGATTCATGAAGCGCTACCCCA 1089
DB 481 AAGGCGCCCAAGAGACCGGGAGAGACAGAGAGCTGATTCATGAAGCGCTACCCCA 540
OY 1090 GCGCAGCGGAGCTTCAGAAAGCCCTTCAAGTACAGAGAGTGAACCAAGAGTCCCGTGG 1149
DB 541 GCGCAGCGGAGCTTCAGAAAGCCCTTCAAGTACAGAGAGTGAACCAAGAGTCCCGTGG 600
OY 1150 ATCGGCGCCCAACACACCTGCGC 1170
DB 601 ATCGGCGCCCACTCACCCCGCGC 621

RESULT 13

AAZ46768
ID AAZ46768 standard; cDNA; 621 BP.

XX
XX
AC AAZ46768;

DT 31-MAR-2000 (first entry)

XX
XX
DE Rat fibroblast growth factor encoding cDNA.

XX
XX
KW Fibroblast growth factor; FGF; tissue formation;
lung tissue interference; rat; ss.

XX
OS Rattus sp.

XX
PN JP1332570-A.

XX
PD 07-DEC-1999.

XX
PF 27-MAY-1998; 98JP-0145478.

XX
PR 27-MAY-1998; 98JP-0145478.

XX
PA (SHIO) SHIONOGI & CO LTD.

XX
DR WPI; 2000-091354/08.

XX
DR P-PSDB; AAY56818.

XX
XX
PT A new fibroblast growth factor and a gene coding it - useful for
PT prevention, treatment and diagnosis of tissue formation interference or
PT treatment of lung tissue interference

XX
PS Claim 1; Page 8-9; 16pp; Japanese.

CC The invention provides fibroblast growth factor (FGF) proteins from
CC human, rat and mouse. FGF is useful for prevention, treatment and
CC diagnosis of tissue formation interference or treatment of lung tissue
CC interference. The present sequence represents a rat FGF encoding cDNA.

SQ Sequence 621 BP; 151 A; 169 C; 183 G; 118 T; 0 other;

Query Match 33.2%; Score 521.8; DB 21; Length 621;
Best Local Similarity 90.0%; Pred. No. 1.2e-75;

Matches 559; Conservative 0; Mismatches 62; Indels 0; Gaps 0;

OY 550 ATGTAATTCAGGCGCCCTCCGCTGCACTTCCGCTGTTACTTCTCTGCTGCTTC 609
DB 1 ATGTAATTCAGGCGCCCTCCGCTGCACTTCCGCTGTTACTTCTCTGCTGCTTC 60
OY 610 CAGGTACAGGTGCTGTTGCTCCGAGAGAACTGCACTTCCGATCCAGTGAACAG 669
DB 61 CAGGTACAGGTGTTGGACCGAGAGAACTGCACTTCCGATCCAGTGAACAG 120
OY 670 ACCGCGGCTCGGAGAGATGAGCCGTAAGCAAGCTGCGCTTACCAAGCTTACAGCCG 729
DB 121 ACCGCGGCTCGGAGATGATGTGAGTGGAAAGCAGTGGCTTACCAAGCTTACAGCA 180
OY 730 ACCAGTGGAAACATATCCAGTCCGCGGCGAGATACAGCCGCGGAGATGG 789
DB 181 ACCAGTGGAAACATATTCAGTCTGGGCGTAGATAGTCCCGGCGAGAGAGCG 240
OY 790 GACAAGTATGCCAGCTCTCTAGTGAAGACAGACACCTTCCGTAGTCAAGTCCGATCA 849
DB 241 GACAAGTATGCCAGCTCTCTAGTGAAGACAGATACCTTCCGAGTCAAGTCCGATCA 300
OY 850 GCGAAGAGAGAGATTTCTACTGTGATGAACCCGAAAGCAAGCTGTGGGAAGCC 909
DB 301 GCGAAGAGAGAGATTTCTACTGTGATGAACCCGAAAGCAAGCTGTGGGAAGCC 360
OY 910 GATGACACAGCAAGAGATGTGTTCATCGAGAGAGTTCGAGAACTACACAGCG 969
DB 361 GATGACACAGCAAGAGATGTGTTCATCGAGAGAGTTCGAGAACTACACAGCG 420
OY 970 CTGATGTGCGCTAAGTACTCCGGCTGTGATGAGTGGCTTACCAAGAGGGCGCGCG 1029
DB 421 CTGATGTGCGCTAAGTACTCCGGCTGTGATGAGTGGCTTACCAAGAGGGCGCGCG 480
OY 1030 AAGGCGCCCAAGAGACCGGGAGAGACAGAGAGCTGATTCATGAAGCGCTACCCCA 1089
DB 481 AAGGCGCCCAAGAGACCGGGAGAGACAGAGAGCTGATTCATGAAGCGCTACCCCA 540
OY 1090 GCGCAGCGGAGCTTCAGAAAGCCCTTCAAGTACAGAGAGTGAACCAAGAGTCCCGTGG 1149
DB 541 GCGCAGCTGAGCTGCAAGAGCCCTTCAAGTACACACAGTACTAAGCGATCCCGCGCG 600

ID	Sequence	Score	Length	Mismatches	Indels	Gaps
1150	ATCCGGCCACACCTGCCC	1170				
601	ATCCGCCCCACTCACC	621				
730	ACCAAGTGGGAACATCATGCTCTCTGGGCGGACAGATCATGCCCCGGCGGACGATGGG	789				
1150	ATCCGGCCACACCTGCCC	1170				
601	ATCCGCCCCACTCACC	621				
730	ACCAAGTGGGAACATCATGCTCTCTGGGCGGACAGATCATGCCCCGGCGGACGATGGG	789				

Db	181	ACWMSNGNAACAVATTHCARTNTYNGGNNMGNMATHMSNGCMNGNGARGAYGGN	240
Qy	790	GACAGATATGCCCCACTCTCTAGTGAGAGACACACTTCGGTAGTCAGTCGGATCAAG	849
Db	241	GAATAATATAGCCATCTATNTNGTNGARNCATACNTTGGMWSNCARGTNMGNATHAAR	300
Qy	850	GGCAAGAGACGGAAATTCCTACCTGTGCATGACCCGAAAGGCAAGCTCGTGGGAAAGCCC	909
Db	301	GGNAARGARACNGARTTATYTTNTGYATGAAYMGNAARGNAARYTNGTNGMAARCCN	360
Qy	910	GATGGACACAGAGAGGTGTTCATCGAAGAGGTCTCGGAGCAACTACACGGCC	969
Db	361	GAATGGACWMSNAAGARGTGTNTTATTHGARARGTNTNGRAAYAAATTAACGNC	420
Qy	970	CTGATGTCCGGCTTAATCTACTCCGGCTGTGACCTGGCTTCACAAAGAGGGCGCCGCG	1021
Db	421	YTNATGWSNGCAANTATYWSNGNGTGTATYTNNGTNTTACNARAARGNMCMNGN	480
. Qy	1030	AAAGGCCCCAGACCCGGAGAGACGACGAGACGTGCATTTTCATGAAGGCTACCCCAAG	108
Db	481	AARGGNCNAARACNMGNGARAAAYCARBARAYGTNATYTAAGARMNTAYCCNAAR	540
Qy	1090	GGGCGACCGGACCTTCAGAGCCCTTCAAGACACGAGTGCAGCCAGAGTCCCGCG	114
Db	541	GGNCARCCGATYTTTCARACCCNTTATATATACNACNGTNAACNAARMGWSNMGMN	600
Qy	1150	ATCCGAGCCACACACACCTGTC	1169
Db	601	ATHMGNCCNACNATCCNGC	620
RESULT 15			
AAV29636			
ID	AAV29636	standard; cdna: 620 BP.	
XX	AAV29636;		
AC	AAV29636;		
XX	24-SEP-1998	(first entry)	
DT			
XX			
DE		Degenerate sequence of fibroblast growth factor homologue zFGF-5.	
XX			
KW		Human; fibroblast growth factor homologue; zFGF-5; cardiac cell; antagonist; antibody; heart failure; stroke; hypertension; cancer; bone defects; arthritis; cardiac myocyte hyperplasia; ss.	
KW			
XX		homo sapiens.	
OS			
XX			
FH	Key	Location/Qualifiers	
FT	CDS	1..621	
FT		/*tag= a	
FT		/product= "fibroblast growth factor homologue zFGF-5"	
XX			
XX	W09816644-A1.		
PN			
PD	23-APR-1998.		
XX			
PF	16-OCT-1997;	97WO-US18635.	
XX			
PR	16-OCT-1996;	96US-0028646.	
XX			
PA	(ZYMO) ZYMOGENETICS INC.		
PI	Bukowski TR, Conklin DC,	Delsner TA, Hansen B, Holderman SD;	
PI	Raymond FC, Shepard PO;		
XX			
DR	WPI: 1998-251291/22.		
XX	P-PSDB; AAW57413.		
PT	New fibroblast growth factor homologue, zFGF-5 - used to develop products for treating e.g. heart failure, stroke, hypertension, bone defects or cancers, arthritis, or wounds		
PS	Claim 2; Page 77; p 94pp; English.		

XX This is the degenerate nucleotide sequence of the novel fibroblast
CC growth factor homologue zFGF-5, used in the method of the invention.
CC The zFGF-5 polypeptides can be used (optionally ex vivo) for enhancing
CC the proliferation of cardiac tissue cells. The polypeptides, nucleic
CC acids, antagonists, and antibodies can also be used in the treatment
CC of disorders such as heart failure, stroke, hypertension, bone defects,
CC cancer, arthritis, or wounds. The products can also be used in the
CC study of cardiac myocyte hyperplasia and regeneration, to target
CC delivery of agents to the heart and for detection and diagnosis. The
CC recombinant cells can be used to produce the protein.

XX Sequence 620 BP; 121 A; 57 C; 104 G; 76 T; 262 other;

Query Match 27.4%; Score 429.8; DB 19; Length 620;

Best Local Similarity 57.3%; Pred. No. 8.3e-61;

Matches 355; Conservative 152; Mismatches 112; Indels 1; Gaps 1;

OY 550 ATGTATTCAGCGCCCTCCGCTGCTGCTGTTTAACTTCCCTGCTGCTGCTTC 609
DB 1 ATGTAWSNGNCNMCNMCNMCNMCNMCNMCNMCNMCNMCNMCNMCNMCNMCN 60
OY 610 CAGGTACAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 669
DB 61 CARGTNCARGTNTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 119
OY 670 ACGCGGCTCGGAGAGTGTGAGCGCTGAGCGCTGAGCGCTGAGCGCTGAGCGCG 729
DB 120 ACNMGNGCMNGAGAYGAYTGNMNGMNGMNGMNGMNGMNGMNGMNGMNGMNG 179
OY 730 ACCAGTGGGAAACACATCAGTCTGCGCCGAGGATGATGCTCCCGCGGAGATGG 789
DB 180 ACNWSNGNARCAVATHCARGTNTGCMNGMNGMNGMNGMNGMNGMNGMNGMNG 239
OY 790 GACAAGTATGCCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 849
DB 240 GATTAATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 299
OY 850 GSCAAGAGACGGAATTCTACTGTGCTGATGAACCGCAAGCAAGCTGCTGCGGAGCC 909
DB 300 GGNAAAGARACGARTTAYTTNTGYATGMNGMNGMNGMNGMNGMNGMNGMNGMNG 359
OY 910 GATGCGACCGACGAGAGTGTGTTTCATGAGAAAGTTCTGGAGAACACTACAGGCC 969
DB 360 GAYGNGACMWSNARAGARTGYGTTTATHGARAARGTNGARAAYATAACNGCN 419
OY 970 CTGATGCTGGCTAAGTACGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1029
DB 420 YTNATGWSNGNARATATWSNGNTGTATGNTGNTTACNARARAGNMGNCNMG 479
OY 1030 AAGGCCCCAAGACCGGAGAACGACGAGCTGATTCATGAGAGCGCTACCCCAAG 1089
DB 480 AARGNCCNARACMNGNARARAYCARCARGAYGTNCATTTATGARMNTAYCCNAR 539
OY 1090 GGGCAGCGCGAGCTTCAGAGCCCTTCAAGTACGAGCGGTGACCAAGAGTCCGCTGG 1149
DB 540 GGNCAACCNGARTNCARARCCNTTAYARTAYACNACNGTACNARAGNWSNMG 599
OY 1150 ATCCGCGCACACACCTGC 1169
DB 600 ATHMGNCNACNCAATCCNCG 619

Search completed: April 26, 2003, 16:27:16
Job time : 276 secs